Ensuring Stable, Fail-Safe WiFi for Modern Swiss Healthcare Center

Overview

Blindenheim Basel is a modern care facility supporting people with visual impairments, providing professional care in a safe and future-ready environment. Its new building, planned and implemented by irides AG, was designed with a reliable and futureproof IT infrastructure in mind. Establishing a robust WiFi network across its seven-story building presented significant challenges. The network had to be high-performing, stable, and resilient during power outages to support critical systems such as the nursing emergency call, while staff needed unrestricted mobility to document and communicate efficiently. Integrating the network into ongoing construction, with initial core stack issues and schedule delays, added further complexity.

Zyxel Networks' Gold Partner Comtool GmbH, together with Studerus, delivered a tailored solution using Zyxel Networks' future-ready technology. The deployment included ninety-three WAX630S and fourteen WAX655E access points, multiple switches, and firewalls. Close collaboration ensured seamless integration, extensive coverage, and high stability.

Challenges

The challenge of establishing a WiFi network in a seven-story building was significant. The requirements for the infrastructure were high: the network had to be stable and high-performing, and resilient during power outages to maintain critical functions such as the nursing emergency call system. For the nursing staff, it was essential that documentation and communication could function without spatial restrictions, ensuring a smooth daily workflow.

Another major obstacle was integrating the network technology into an ongoing construction process. Frequent schedule delays, coupled with initial issues in the core stack that prevented external connections, required flexible and rapid adaptation.

Customer
Blindenheim Basel

Industry
Healthcare

Location
Basel, Switzerland

Partner
Comtool and Studerus

Customer Background
At the Blindenheim Basel, a facility responsible for the care and support of people with visual impairments and blindness, a new building was built to meet the highest standards in terms of infrastructure and technology. The new building for the Blindenheim, planned and implemented by irides AG, was designed to provide a modern, reliable, and future-proof IT infrastructure.

> ## "The network infrastructure functions perfectly and exactly as planned. Our employees are genuinely thrilled with the reliable and seamless WiFi performance."

Georges Krieg, Managing Director
irides AG

Solutions

Zyxel Networks' Gold Partner Comtool GmbH took the lead in planning and installing the WiFi network, teaming up with Studerus to design a solution tailored to the facility's needs. By leveraging Zyxel Networks' powerful technology, the team created a network that not only met the immediate demands but was also scalable and future-ready, ensuring long-term reliability and flexibility.

The deployment included a total of ninety-three WAX630S WiFi access points, fourteen WAX655E units, and a range of switches and firewalls. XMG1930-30HP and XGS2220-54FP switches constructed the backbone of a stable network architecture, while two ATP700 firewalls safeguarded security across the system. On the top floors, XS3800-28 core switches provided the performance and redundancy required for seamless operations. Despite technical and logistical hurdles, the project was completed on schedule, thanks to close collaboration between Comtool, Studerus, and Zyxel Networks, ensuring the network integrated smoothly into the new building and supported the facility's modern care operations.

Results

Blindenheim Basel implements a futureproof, fail-safe WiFi solution that meets the demands of a modern care facility, thanks to Comtool's expertise and Zyxel Networks' high-quality technology. The network delivers high stability and extensive coverage across all seven stories, which the organization particularly highlights. Blindenheim Basel is "more than satisfied" with the installed solution. This successful collaboration and the resulting customer satisfaction underscore the importance of strong partnerships and innovative technology in delivering complex projects.

- Reliable WiFi coverage across all seven floors
- Critical systems remain operational during power outages
- Staff can work and communicate without restrictions

Product List

- WAX630S WiFi 6 Access Point
- WAX655E WiFi 6 Outdoor Access Point

- XS3800-28 L3 Aggregation Switch
- XGS2220-54FP/XGS2220-30HP L3 Access Switch
- XMG1930-30HP Lite-L3 Smart Managed PoE Switch

- ATP700 Firewall